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RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/674,183

DATE: 08/01/2002  
 TIME: 11:19:56

Input Set : A:\seqlist.txt  
 Output Set: N:\CRF3\08012002\I674183.raw

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3 <110> APPLICANT: RAPPUOLI, Rino
4   GRANDI, Guido
6 <120> TITLE OF INVENTION: POLYPEPTIDE CARRIER PROTEIN
8 <130> FILE REFERENCE: PP00362.102 / 2302-0362
10 <140> CURRENT APPLICATION NUMBER: 09/674,183
11 <141> CURRENT FILING DATE: 2000-11-14
13 <150> PRIOR APPLICATION NUMBER: PCT/IB99/00844
14 <151> PRIOR FILING DATE: 1999-04-27
16 <150> PRIOR APPLICATION NUMBER: GB9808932.9
17 <151> PRIOR FILING DATE: 1998-04-27
19 <160> NUMBER OF SEQ ID NOS: 20
21 <170> SOFTWARE: PatentIn Ver. 2.1
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24 <211> LENGTH: 15
25 <212> TYPE: PRT
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54 <211> LENGTH: 18
55 <212> TYPE: PRT
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67 <211> LENGTH: 21

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76           20
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80 <211> LENGTH: 14
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91 <212> TYPE: PRT
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102 <213> ORGANISM: T-cell epitope HBVnc
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133 <211> LENGTH: 20
134 <212> TYPE: PRT
135 <213> ORGANISM: T-cell epitope HSP70
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162 <222> LOCATION: (1)..(657)
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169 tac aag gac gac gat gat atc gaa ggt cgc aaa ggt gtt tcc atc gac 96
170 Tyr Lys Asp Asp Asp Asp Ile Glu Gly Arg Lys Gly Val Ser Ile Asp
171           20           25           30
173 aaa ttc cgt atc ttc tgc aaa gct aac ccg aaa aaa ggt ctg aaa ttc 144
174 Lys Phe Arg Ile Phe Cys Lys Ala Asn Pro Lys Lys Gly Leu Lys Phe
175           35           40           45
177 atc atc aaa cgt tac acc ccg aac aac gaa atc gac tcc aaa ggt atc 192
178 Ile Ile Lys Arg Tyr Thr Pro Asn Asn Glu Ile Asp Ser Lys Gly Ile
179           50           55           60
181 cgt gaa gac aac aac atc acc ctg aaa ctg gac cgt tgc aac aac aaa 240
182 Arg Glu Asp Asn Asn Ile Thr Leu Lys Leu Asp Arg Cys Asn Asn Lys
183 65           70           75           80
185 ggt gaa aag aag atc gct aaa atg gaa aaa gct tct tct gtt ttc aac 288
186 Gly Glu Lys Lys Ile Ala Lys Met Glu Lys Ala Ser Ser Val Phe Asn
187           85           90           95
189 gtt gtt aac tct aaa ggt ttc aac aac ttc acc gtt tcc ttc tgg ctg 336
190 Val Val Asn Ser Lys Gly Phe Asn Asn Phe Thr Val Ser Phe Trp Leu
191           100          105          110
193 cgt gtt ccg aaa gtt tcc gct tcc cac ctg gaa aaa ggt cag tac atc 384
194 Arg Val Pro Lys Val Ser Ala Ser His Leu Glu Lys Gly Gln Tyr Ile
195           115          120          125
197 aaa gct aac tcc aaa ttc atc ggt atc acc gaa aaa ggt gga tct ccg 432
198 Lys Ala Asn Ser Lys Phe Ile Gly Ile Thr Glu Lys Gly Gly Ser Pro
199           130          135          140
201 cat cat acc gcg ctg cgc cag gcg att ctg tgc tgg ggc gaa ctg atg 480
202 His His Thr Ala Leu Arg Gln Ala Ile Leu Cys Trp Gly Glu Leu Met
203 145          150          155          160

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205 acc ctg gcg aaa gga tct ccg aaa tat gtg aaa cag aac acc ctg aaa 528
206 Thr Leu Ala Lys Gly Ser Pro Lys Tyr Val Lys Gln Asn Thr Leu Lys
207 165 170 175
209 ctg gcg acc aaa gga tcg ttt ttt ctg ctg acc cgc att ctg acc att 576
210 Leu Ala Thr Lys Gly Ser Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile
211 180 185 190
213 ccg cag tct ctg gat aaa ggc tat tct ggc ccg ctg aaa gcg gaa att 624
214 Pro Gln Ser Leu Asp Lys Gly Tyr Ser Gly Pro Leu Lys Ala Glu Ile
215 195 200 205
217 gcg cag cgc ctg gaa gat gtg aaa gga tcc taa 657
218 Ala Gln Arg Leu Glu Asp Val Lys Gly Ser
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224 <212> TYPE: PRT
225 <213> ORGANISM: Recombinant N10 construct
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231 Tyr Lys Asp Asp Asp Asp Ile Glu Gly Arg Lys Gly Val Ser Ile Asp
232 20 25 30
234 Lys Phe Arg Ile Phe Cys Lys Ala Asn Pro Lys Lys Gly Leu Lys Phe
235 35 40 45
237 Ile Ile Lys Arg Tyr Thr Pro Asn Asn Glu Ile Asp Ser Lys Gly Ile
238 50 55 60
240 Arg Glu Asp Asn Asn Ile Thr Leu Lys Leu Asp Arg Cys Asn Asn Lys
241 65 70 75 80
243 Gly Glu Lys Lys Ile Ala Lys Met Glu Lys Ala Ser Ser Val Phe Asn
244 85 90 95
246 Val Val Asn Ser Lys Gly Phe Asn Asn Phe Thr Val Ser Phe Trp Leu
247 100 105 110
249 Arg Val Pro Lys Val Ser Ala Ser His Leu Glu Lys Gly Gln Tyr Ile
250 115 120 125
252 Lys Ala Asn Ser Lys Phe Ile Gly Ile Thr Glu Lys Gly Gly Ser Pro
253 130 135 140
255 His His Thr Ala Leu Arg Gln Ala Ile Leu Cys Trp Gly Glu Leu Met
256 145 150 155 160
258 Thr Leu Ala Lys Gly Ser Pro Lys Tyr Val Lys Gln Asn Thr Leu Lys
259 165 170 175
261 Leu Ala Thr Lys Gly Ser Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile
262 180 185 190
264 Pro Gln Ser Leu Asp Lys Gly Tyr Ser Gly Pro Leu Lys Ala Glu Ile
265 195 200 205
267 Ala Gln Arg Leu Glu Asp Val Lys Gly Ser
268 210 215
271 <210> SEQ ID NO: 15
272 <211> LENGTH: 432
273 <212> TYPE: DNA
274 <213> ORGANISM: Recombinant N6 construct

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286 Tyr Lys Asp Asp Asp Ile Glu Gly Arg Lys Gly Val Ser Ile Asp
287 20 25 30
289 aaa ttc cgt atc ttc tgc aaa gct aac ccg aaa aaa ggt ctg aaa ttc 144
290 Lys Phe Arg Ile Phe Cys Lys Ala Asn Pro Lys Lys Gly Leu Lys Phe
291 35 40 45
293 atc atc aaa cgt tac acc ccg aac aac gaa atc gac tcc aaa ggt atc 192
294 Ile Ile Lys Arg Tyr Thr Pro Asn Asn Glu Ile Asp Ser Lys Gly Ile
295 50 55 60
297 cgt gaa gac aac aac atc acc ctg aaa ctg gac cgt tgc aac aac aaa 240
298 Arg Glu Asp Asn Asn Ile Thr Leu Lys Leu Asp Arg Cys Asn Asn Lys
299 65 70 75 80
301 ggt gaa aag aag atc gct aaa atg gaa aaa gct tct tct gtt ttc aac 288
302 Gly Glu Lys Lys Ile Ala Lys Met Glu Lys Ala Ser Ser Val Phe Asn
303 85 90 95
305 gtt gtt aac tct aaa ggt ttc aac aac ttc acc gtt tcc ttc tgg ctg 336
306 Val Val Asn Ser Lys Gly Phe Asn Asn Phe Thr Val Ser Phe Trp Leu
307 100 105 110
309 cgt gtt ccg aaa gtt tcc gct tcc cac ctg gaa aaa ggt cag tac atc 384
310 Arg Val Pro Lys Val Ser Ala Ser His Leu Glu Lys Gly Gln Tyr Ile
311 115 120 125
313 aaa gct aac tcc aaa ttc atc ggt atc acc gaa aaa ggt gga tcc taa 432
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327 Tyr Lys Asp Asp Asp Asp Ile Glu Gly Arg Lys Gly Val Ser Ile Asp
328 20 25 30
330 Lys Phe Arg Ile Phe Cys Lys Ala Asn Pro Lys Lys Gly Leu Lys Phe
331 35 40 45
333 Ile Ile Lys Arg Tyr Thr Pro Asn Asn Glu Ile Asp Ser Lys Gly Ile
334 50 55 60
336 Arg Glu Asp Asn Asn Ile Thr Leu Lys Leu Asp Arg Cys Asn Asn Lys
337 65 70 75 80
339 Gly Glu Lys Lys Ile Ala Lys Met Glu Lys Ala Ser Ser Val Phe Asn
340 85 90 95
342 Val Val Asn Ser Lys Gly Phe Asn Asn Phe Thr Val Ser Phe Trp Leu

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VERIFICATION SUMMARY

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